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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/800,585	03/15/2004	Jose Madeira De Freitas Garcia	G&C 30566.319-US-01	1655

55895 7590 01/09/2007

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EXAMINER	
ORR, HENRY W	
ART UNIT	**PAPER NUMBER**
2176	

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	01/09/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary	Application No.	Applicant(s)	
	10/800,585	GARCIA ET AL.	
	Examiner	Art Unit	
	Henry Orr	2197	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *15 March 2004*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-33* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-33* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☒ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *3/15/2004* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *1/20/2005*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

1. This action is responsive to application communication filed March 15, 2004;

2. Claims 1-33 are pending in the case. Claims 1, 12, and 23 are independent claims.

Information Disclosure Statement

3. The information disclosure statement (IDS) submitted on January 20, 2005 is in compliance with the provisions of 37 CFR 1.97. Accordingly, the examiner is considering the information disclosure statement.

Specification

4. The disclosure is objected to because of the following informalities:

a) According to Fig. 7, **"Block 702"** should be replaced with **"Block 704"** on p. 17 line 16.

b) **"Block 702"** should be added to specification on p. 17 within the 11.3 Views section to accurately reflect the description of the display view feature of Block 702 in Fig. 7.

Appropriate corrections are required.

Claim Rejections - 35 USC § 101

5. 35 U.S.C. 101 reads as follows:

> Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

6. Claims 16-33 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. The language of the claims raises a question as to whether the claims are directed merely to abstract ideas that are not tied to a technological art, environment, or machine which would result in a practical application producing a concrete, useful, and tangible result to form the basis of statutory subject matter under 35 U.S.C. 101. Claims considered to be Non-functional Descriptive Material are not statutory even if in combination with a physical medium. see MPEP § 2106

Regarding claims 16-33, the phrase **"article of manufacture"** is intended to cover a signal as disclosed in the specification (p. 6 lines 8-11). Claiming a signal per se is considered non-statutory subject matter because a signal is a form of energy.

Claim Rejections - 35 USC § 112

7. The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

8. Claims 1-33 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Independent claims 1, 12, and 23, recite the phrase **"the Sheet Set Manager"**. There is insufficient antecedent basis for this limitation in the claims because **"the Sheet Set Manager"** has not been previously recited.

Claims 10, 21, and 32, recite the relative term **"appropriate"** which render the claims as indefinite. The term **"appropriate"** is not defined by the claims, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention.

Claims 10, 21, and 32, further recite the pronoun **"their"**, which render the claims as indefinite because what is being referred to as **"their"** is not clearly set forth in the claims.

Claims 11, 22, and 33, recite the phrase **"the user"**. There is insufficient antecedent basis for this limitation in the claims because **"the user"** has not been previously recited.

Dependent claims 2-11, 13-22, and 24-33 are rejected for fully incorporating the deficiencies of their respective base claims.

Double Patenting

9. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

10. Claims 1-33 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-15 of copending Application # 10/800786.

Although conflicting claims 1, 12 and 23 of instant application and claims 1, 6 and 11 of co-pending application # 10/800786 are not identical, the respective claims are not patentably distinct from each other because the instant claims recite similar features. However, claim 1 of copending application # 10/800786 recites the limitation **"Sheet Set Manager publishes the Sheet Set"**, which is an obvious variation of limitation **"Sheet Set Manager manages one or more different views for the Sheets"** recited in claim 1 of the instant application.

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the Sheet Set Manager function of the co-pending application # 10/800786 because when the Sheet Set is published the Sheets are made known to the user. The Sheets of the Sheet Set function in the limitation of claim 1 of the instant application are also published or made known to the user in order for the usefulness for managing the Sheets to be realized.

Claims 12 and 23 are substantially encompassed in claim 1 above, therefore the claims are rejected under the same rationale as claim 1 above in respect to claims 6 and 11 of the copending Application #10/800786.

Dependent claims 2-11, 13-22 and 24-33 are rejected for fully incorporating the deficiencies of their respective base claims.

11. Claims 1-33 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-21 of copending Application # 10/800877.

Although conflicting claims 1, 12 and 23 of instant application and claims 1, 8 and 15 of co-pending application # 10/800877 are not identical, the respective claims are not patentably distinct from each other because the instant claims recite similar features. However, claim 1 of copending application # 10/800877 recites the limitation **"Sheet Set Manager displays a logical structure for the Sheet Set, Subsets, and Sheets on the computer"**, which is an obvious variation of limitation **"Sheet Set Manager manages one or more different views for the Sheets"** recited in claim 1 of the instant application.

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the Sheet Set Manager function of the co-pending application # 10/800877 because displaying a logical structure for the Sheets involves managing views for the Sheets according to a logical structure that must be displayed to

the user on the computer in order for the usefulness for managing the logical structure of the views for the Sheets to be realized.

Claims 12 and 23 are substantially encompassed in claim 1 above, therefore the claims are rejected under the same rationale as claim 1 above in respect to claims 8 and 15 of the copending Application #10/800877.

Dependent claims 2-11, 13-22 and 24-33 are rejected for fully incorporating the deficiencies of their respective base claims.

Claim Rejections - 35 USC § 103

12. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

13. **Claims 1, 3, 12, 14, 23 and 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bonney et al. (hereafter referred to as Bonney), U.S. Patent # 6,466,953 B1 of record, in view of Takahashi et al. (hereafter referred to as Takahashi), U.S. Patent # 6,339,439 B1.**

The applied Bonney reference has a common assignee with the instant application. Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art only under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 103(a) might be overcome by: (1) a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the inventor of this application and is

thus not an invention "by another"; (2) a showing of a date of invention for the claimed subject matter of the application which corresponds to subject matter disclosed but not claimed in the reference, prior to the effective U.S. filing date of the reference under 37 CFR 1.131; or (3) an oath or declaration under 37 CFR 1.130 stating that the application and reference are currently owned by the same party and that the inventor named in the application is the prior inventor under 35 U.S.C. 104, together with a terminal disclaimer in accordance with 37 CFR 1.321(c). This rejection might also be overcome by showing that the reference is disqualified under 35 U.S.C. 103(c) as prior art in a rejection under 35 U.S.C. 103(a). See MPEP § 706.02(l)(1) and § 706.02(l)(2).

Regarding claim 1, Bonney teaches **"Drawings, in general, may include many details of the models such as, but not limited, alternate views, section views, detail views of certain aspects of each of the models" (col. 1 lines 26-30).** (claim 1; i.e., wherein the Sheet Set Manager manages a one or more Sheet Sets, each of the Sheet Sets comprises a collection of zero or more Sheets and Subsets of the Sheets, each of the Sheets comprises a drawing, layout or view, and the Sheet Set Manager manages one or more different views for the Sheets.) Examiner considers the drawings to be a set of drawing sheets and the section views to be subsets of the sheets.

Bonny does teach a graphic program such as a computer aided design application program (Bonney; abstract). Bonney does not expressly teach performing a Sheet Set Manager function in a graphics program. However, Takahashi teaches **"a logical planes (hereinafter referred to as sheets)" (col. 1 lines 12-14).** Takahashi further teaches **"a display plane generating function etc...a derivative display**

plane generating function etc...a logical display plane displaying function etc..." (col. 5 lines 15-30). Examiner considers the different logical plane functions as sheet functions for managing sets of logical plane sheets.

In the same field of endeavor, the relationship between drawing sheets is managed (Bonney; col. 1 lines 50-52). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Bonny's application 220 of Figure 2 to include the sheet set functions as taught by Taskahashi because the intent of Bonny invention was to accurately manage and use the drawings sheets (Bonney; col. 1 lines 48-50). Thus, for the purpose of managing the drawings, a Sheet Set Manager Function would have been created from the sheet set functions. (claim 1; i.e., performing a Sheet Set Manager function in the graphics program)

Regarding claim 3, Bonney teaches **"each sheet illustrates a certain detail of a model" (col. 1 lines 32-33).** (claim 3; i.e., wherein each of the views is associated with a viewport) Examiner considers the illustration of the certain detail of a model to be associated with a viewport because according to the applicant a viewport is a bounded area that displays some portion of the model space of the model (see p. 7 lines 14-15). Therefore, the certain detail of a model would be an example of a bounded area that is displaying a portion of the model space of the model.

Claims 12 and 14 are directed towards an apparatus and are substantially encompassed in method claims 1 and 3, respectfully; therefore the apparatus claims are rejected under the same rationale as method claims 1 and 3 above. It would have been obvious to one of ordinary skill in the art at the time the invention was made to

configure the apparatus of Bonney's Figure 2 because the apparatus is capable of operating a graphic program such as a computer aided design application program to perform the limitations as recited in apparatus claims 11 and 14 as further explained under the rationale of method claims 1 and 3 above.

Claims 23 and 25 are directed towards manufacture claims and are substantially encompassed in method claims 1 and 3, respectfully; therefore the manufacture claims are rejected under the same rationale as method claims 1 and 3 above. It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the application program of Bonney's Figure 2 because the application program is capable of embodying logic for operating like a graphic program such as a computer aided design application program to perform the limitations as recited in manufacture claims 23 and 25 as further explained under the rationale of method claims 1 and 3 above. (Bonney; col. 4 lines 1-5)

14. Claims 2, 13 and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bonney, in view of Takahashi as cited and applied to claim 1 above, in further view of Love et al. (hereafter referred to as Love), U.S. Publication # 2004/0177089.

The applied Bonney reference has a common assignee with the instant application. Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art only under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 103(a) might be overcome by: (1) a showing under 37 CFR 1.132 that any invention disclosed

but not claimed in the reference was derived from the inventor of this application and is thus not an invention "by another"; (2) a showing of a date of invention for the claimed subject matter of the application which corresponds to subject matter disclosed but not claimed in the reference, prior to the effective U.S. filing date of the reference under 37 CFR 1.131; or (3) an oath or declaration under 37 CFR 1.130 stating that the application and reference are currently owned by the same party and that the inventor named in the application is the prior inventor under 35 U.S.C. 104, together with a terminal disclaimer in accordance with 37 CFR 1.321(c). This rejection might also be overcome by showing that the reference is disqualified under 35 U.S.C. 103(c) as prior art in a rejection under 35 U.S.C. 103(a). See MPEP § 706.02(l)(1) and § 706.02(l)(2).

Regarding claim 2, Bonney does not expressly teach re-defining the boundaries of the views after creation. However, Love teaches **"the boundary is a bounding rectangle, the step of dividing the boundary to define a plurality of view areas comprising splitting the bounding rectangle to define a plurality of view rectangles" (p. 2 par. 21-23).** (claim 2; i.e., wherein boundaries for the views are re-defined after creation.) Examiner considers the boundary of the rectangle view as already created. Then the boundary of the rectangle view is split to define a plurality of view rectangles, which is considered re-defining the boundaries with the plurality view rectangles.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to identify the views in the drawings generated by Bonney's computer aided program with the sheet set functions as taught by Takahashi using the

redefining method as taught by Love to provide the benefit of reducing costs by being able to retrieve drawings of existing components from a database of drawings in a computer aided design system (Love; p. 2 par. 2).

Claim 13 is directed towards an apparatus and is substantially encompassed in method claim 2, respectfully; therefore the apparatus claim is rejected under the same rationale as method claim 2 above. It would have been obvious to one of ordinary skill in the art at the time the invention was made to configure the apparatus of Bonney's Figure 2 because the apparatus is capable of operating a graphic program such as a computer aided design application program to perform the limitations as recited in apparatus claim 13 as further explained under the rationale of method claim 2 above.

Claim 24 is directed towards a manufacture claim and is substantially encompassed in method claim 2, respectfully; therefore the manufacture claim is rejected under the same rationale as method claim 2 above. It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the application program of Bonney's Figure 2 because the application program is capable of embodying logic for operating like a graphic program such as a computer aided design application program to perform the limitations as recited in manufacture claim 24 as further explained under the rationale of method claim 2 above. (Bonney; col. 4 lines 1-5)

15. Claims 4, 15 and 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bonney in view of Takahashi as cited and applied to claim 1 above, in further view of Matthews et al. (hereafter referred to as Matthews), U.S.

Patent # 7,047,180 B1.

The applied Matthews reference has a common assignee with the instant application. Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art only under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 103(a) might be overcome by: (1) a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the inventor of this application and is thus not an invention "by another"; (2) a showing of a date of invention for the claimed subject matter of the application which corresponds to subject matter disclosed but not claimed in the reference, prior to the effective U.S. filing date of the reference under 37 CFR 1.131; or (3) an oath or declaration under 37 CFR 1.130 stating that the application and reference are currently owned by the same party and that the inventor named in the application is the prior inventor under 35 U.S.C. 104, together with a terminal disclaimer in accordance with 37 CFR 1.321(c). This rejection might also be overcome by showing that the reference is disqualified under 35 U.S.C. 103(c) as prior art in a rejection under 35 U.S.C. 103(a). See MPEP § 706.02(l)(1) and § 706.02(l)(2).

Regarding claim 4, Bonney does not expressly teach representing the view with a thumbnail preview image. However, Matthews teaches **"a project web site may allow easy access to drawing data via a quick preview (e.g., a thumbnail view)" (col. 5 lines 23-27).** (claim 4; i.e., wherein each of the views is represented by a thumbnail preview image displayed by the Sheet Set Manager.) Examiner considers the drawing data in the quick preview image as a view of the drawing sheet.

It would have been obvious to one of ordinary skill in the art at the time the

invention was made to modify Bonney's application program using the sheet set functions as taught by Takahashi to display a thumbnail view as taught by Matthews to provide the benefit of preventing the user of manually publishing or converting the drawing or manually searching for the information using a drawing viewer (Matthews; col. 5 lines 25-27).

Claim 15 is directed towards an apparatus and is substantially encompassed in method claim 4, respectfully; therefore the apparatus claim is rejected under the same rationale as method claim 4 above. It would have been obvious to one of ordinary skill in the art at the time the invention was made to configure the apparatus of Bonney's Figure 2 because the apparatus is capable of operating a graphic program such as a computer aided design application program to perform the limitations as recited in apparatus claim 15 as further explained under the rationale of method claim 4 above.

Claim 26 is directed towards a manufacture claim and is substantially encompassed in method claim 4, respectfully; therefore the manufacture claim is rejected under the same rationale as method claim 4 above. It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the application program of Bonney's Figure 2 because the application program is capable of embodying logic for operating like a graphic program such as a computer aided design application program to perform the limitations as recited in manufacture claim 26 as further explained under the rationale of method claim 4 above. (Bonney; col. 4 lines 1-5)

16. **Claims 5-11, 16-22 and 27-33 are rejected under 35 U.S.C. 103(a) as being**

unpatentable over Bonney in view of Takahashi as cited and applied to claim 1 above, in further view of Kawai, U.S. Publication # 2003/0043177.

Regarding claim 5, Bonney does not expressly teach automatically creating different views for the sheets in response to a user command. However, Kawai teaches **"the operator (i.e., user) can automatically create the exploded view based on the support by the computer" (p.4 par. 47).** (claim 5; i.e., wherein the Sheet Set Manager automatically creates one or more different views for the Sheets in response to a user command). Examiner considers the exploded views illustrated in Figure 8 and Figure 9 to be the automatic created different views for the drawing sheet in Figure 7 (see Kawai Figures 7, 8, and 9). The **"All"** and **"first level"** buttons in Figure 7 generate the views in response to the user selecting the buttons (see Figure 7 ref#35 ref#36). The user can create the exploded view of the design in accordance with an exploded view creation command (Kawai; p.1 par. 14).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to attach to Bonny communication bus line, an automatic creation device to automatically create the exploded view as taught by Kawai using the three-dimensional computer aided design application data as taught by Bonney and to display the exploded view using the sheet set functions as taught by Takahashi to provide the benefit of easily obtaining views automatically without the tedious troublesome of additional drawing operations. (Bonney; Figure 2) (Kawai; p. 1 par. 12 and par. 14)

Regarding claim 6, Bonney teaches **"hierarchical relationships between sheets can be created, modified and/or deleted by dragging and dropping icons**

displayed on display device 121" (col. 4 lines 45-49). (claim 6; i.e., wherein the user command comprises a drag-and-drop operation.) Examiner considers the dragging and dropping of icons to be a drag-and-drop operation by the user.

Regarding claim 7, Bonney teaches **"the sheet represented by icon 330 may have been stored in a separate file" (col. 6 lines 15-17).** (claim 7; i.e., wherein the Sheet Set Manager creates a reference to a file containing the automatically created view.) Examiner considers the icon serving as a reference to a separate file that contains a sheet. The sheet represents the automatically created view as explained in the rationale of claim 5.

Regarding claim 8, Bonney does not expressly teach a viewport displaying a geometric defined in the automatically created view. However, Kawai Figure 5 illustrates a bounded area that is displaying a portion of the model space of the model, which is considered to be a viewport as defined by applicant specification (see p. 7 lines 14-15). (claim 8; i.e., wherein the Sheet Set Manager creates a viewport displaying a geometric region defined in the automatically created view.)

It would have been obvious to one of ordinary skill in the art at the time the invention was made to attach to Bonny communication bus line, an automatic creation device to create a viewport displaying a geometric region for the automatically created exploded view as taught by Kawai and to display the viewport using the sheet set functions as taught by Takahashi to provide the benefit of freely specifying the viewing direction of the viewport for the exploded view. Thus, the automatic exploded view can be displayed thru various predetermined viewports. (Bonney; Figure 2) (Kawai; p. 2 par.

30 and par. 33)

Regarding claim 9, Bonney teaches **"Fig. 2 is one embodiment of a computer system executing a CAD application program that generates objects of the drawing sheets of a design with a hierarchical relationship" (col. 3 lines 65-67).** (claim 9; i.e., wherein the automatically created view is placed in a hierarchical representation displayed on the computer.) Examiner considers Figure 2 as an illustration of drawing sheets in a hierarchical representation on a computer display device (see Figure 2 ref# 121). The drawing sheet represents the automatically created view as explained in the rationale of claim 5.

Regarding claim 10, Bonney teaches **"a reverse update can also be provided. If field 420 of icon 440 is modified, field 420 of sheet 400 can be automatically updated. Automatic updates are not limited to fields within title blocks. Any field of component of sheet 400 can be linked to icon 440" (col. 6 lines 33-37).** (claim 10; i.e., wherein the Sheet Set Manager places a label block associated with the automatically created view into the Sheet, with fields to display appropriate label information for the automatically created view, which updates automatically if their values change.) Examiner considers the title block of the sheet to be a label block that contains fields that can be automatically updated when the corresponding icon field changes.

Regarding claim 11, Bonney does not expressly teach allowing a user to adjust a scale of the automatically created view. However, Kawai teaches **"the input screen 26 includes a space 27 for inputting the assembling position (i.e., reference position)**

and a space 28 for inputting the assembling direction (i.e., three-dimensional direction)" (p. 2 par. 33). (claim 11; i.e., wherein the Sheet Set Manager allows the user to adjust a scale of the automatically created view.) Examiner considers Kawai Figure 5 as an illustration of the scale adjustment performed by the user at the input screen in Kawai's Figure 4.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Bonney's application program with the sheet set functions as taught by Takahashi to display an input screen to adjust a scale as taught by Kawai to provide the benefit of the user predetermining the scale of the automatically created exploded view. Thus, the user has direct control over the change of positioning of parts constructed from the shape data. (Bonney; Figure 2 ref# 220) (Kawai; abstract, p. 2 par. 30 and par. 33)

Claims 16, 17, 18, 19, 20, 21 and 22 are directed towards an apparatus and are substantially encompassed in method claims 5, 6, 7, 8, 9, 10 and 11, respectfully, therefore the apparatus claims are rejected under the same rationale as method claims 5, 6, 7, 8, 9, 10 and 11 above. It would have been obvious to one of ordinary skill in the art at the time the invention was made to configure the apparatus of Bonney's Figure 2 because the apparatus is capable of operating a graphic program such as a computer aided design application program to perform the limitations as recited in apparatus claims 16, 17, 18, 19, 20, 21 and 22 as further explained under the rationale of method claims 5, 6, 7, 8, 9, 10 and 11 above.

Claims 27, 28, 29, 30, 31, 32 and 33 are directed towards manufacture claims

and are substantially encompassed in method claims 5, 6, 7, 8, 9, 10 and 11, respectfully, therefore the manufacture claims are rejected under the same rationale as method claims 5, 6, 7, 8, 9, 10 and 11 above. It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the application program of Bonney's Figure 2 because the application program is capable of embodying logic for operating like a graphic program such as a computer aided design application program to perform the limitations as recited in manufacture claims 27, 28, 29, 30, 31, 32 and 33 as further explained under the rationale of method claims 5, 6, 7, 8, 9, 10 and 11 above. (Bonney; col. 4 lines 1-5)

Conclusion

17. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Henry Orr whose telephone number is (571) 274 1308. The examiner can normally be reached on Monday thru Friday 8 to 4.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gary Jackson can be reached on (571) 270 1279. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Henry Orr
Examiner
Art Unit 2197

12/27/2006
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